

**To:** Sally L. Brown[slb@u.washington.edu]  
**Cc:** Rufus.Chaney@ARS.USDA.GOV[Rufus.Chaney@ARS.USDA.GOV]; Sprenger, Mark[Sprenger.Mark@epa.gov]; Compton, Harry[Compton.Harry@epa.gov]; Mahoney, Michele[Mahoney.Michele@epa.gov]  
**From:** Allen, HarryL  
**Sent:** Wed 8/19/2015 6:40:43 PM  
**Subject:** RE: Help!!

Cool! I'll send a number out shortly

-----Original Message-----

From: Sally L. Brown [mailto:slb@u.washington.edu]  
Sent: Wednesday, August 19, 2015 11:26 AM  
To: Allen, HarryL  
Cc: Rufus.Chaney@ARS.USDA.GOV; Sprenger, Mark; Compton, Harry; Mahoney, Michele  
Subject: Re: Help!!

Happy to be on the call as well

It is critical to convey in your meeting that the sick yellow color of the spill was from newly precipitated Fe oxides, that Fe is a component of every soil, is a necessary human and plant nutrient so that color alone- while awful from a stream perspective- does not indicate poison

There are likely constituents in the mix (Cd, As...) and characteristics of the water (low pH) that are not good. But the relative loading of these in relation to the quantity of water and the weight of soil is one way to put this into perspective

This was a bad thing- water quality repercussions and soil repercussions are two different things

On Wed, 19 Aug 2015, Allen, HarryL wrote:

> That's best. I'll send a number.  
>  
> Sent from my iPhone  
>  
>> On Aug 19, 2015, at 11:08 AM, "Chaney, Rufus" <Rufus.Chaney@ARS.USDA.GOV> wrote:  
>>  
>> Harry L:  
>>  
>> If you want a conference call with as many of us as you can reach, give us a number. I'll call when the time comes.  
>>  
>> My cell phone is 301-395-4852, and can be reached at any time I have my pants on. And get messages. My office phone is 301-504-8324, but I can't get messages there.  
>>  
>> Best,  
>>  
>> Rufus  
>>  
>> -----Original Message-----  
>> From: Allen, HarryL [mailto:Allen.HarryL@epa.gov]  
>> Sent: Wednesday, August 19, 2015 2:04 PM  
>> To: Chaney, Rufus  
>> Cc: slb@u.washington.edu; Sprenger, Mark; Compton, Harry; Mahoney,  
>> Michele

>> Subject: Re: Help!!  
>>  
>> That will work great for me! Thanks very much. How shall I contact you? I can send out a number.  
>>  
>> Sent from my iPhone  
>>  
>>> On Aug 19, 2015, at 10:37 AM, "Chaney, Rufus" <Rufus.Chaney@ARS.USDA.GOV> wrote:  
>>>  
>>> Harry et al:  
>>>  
>>> I can talk this PM at your convenience until 5 EDT if it would be helpful after this message.  
>>>  
>>> In my mind the focus should be on suspended and dissolved metals in the water they would use to irrigate or drink. As soon as the pH rose from the mine drainage water mixing with the stream water to the usual pH of the stream (alkaline), the metals would precipitate but in fine particles might remain suspended for some distance. And with all the hydrous Fe oxide just precipitated, the arsenate would be strongly sorbed to the sediment. Of course the stream sediments will have become substantially contaminated and very difficult to deal with. And can be remobilized by high water flows.  
>>>  
>>> If the farmers could allow a settling pond to remove the fine suspended solids before they use it for irrigation, that might give the polishing needed to remove practical risk. I do not believe there would be food-chain risk, only drinking water if sediments are not removed from the water to be drunk.  
>>>  
>>> We have not seen the concentrations of metals in the water or sediments, only heard news. Gold mine -- highly acidic from pyrite oxidation = means As, Fe, Mn, and perhaps measurable Cd, Zn, Cu.  
>>>  
>>> But the farmers' soils are calcareous, which means that the metals won't be phytotoxic in post-sedimented water. And As would not be phytotoxic at the levels that would be attained in the irrigated soils, and uptake by crops other than rice (not grown there) are very small, not a health risk except thru soil ingestion.  
>>>  
>>> Hope this helps.  
>>>  
>>> Rufus  
>>>  
>>>  
>>>  
>>> -----Original Message-----  
>>> From: Allen, HarryL [mailto:Allen.HarryL@epa.gov]  
>>> Sent: Wednesday, August 19, 2015 1:25 PM  
>>> To: slb@u.washington.edu; Chaney, Rufus  
>>> Cc: Sprenger, Mark; Compton, Harry; Mahoney, Michele  
>>> Subject: Help!!  
>>> Importance: High  
>>>  
>>> Hi Sally & Rufus - maybe Mark you have an idea too, I could really use a check in with some of you today re: the impact of the Silverton Spill on the Navajo - specifically Navajo farmers. In advance of a Farm Board meeting tomorrow, I need to provide some sort of data interpretation and risk assessment today.  
>>>  
>>> Specifically, I need to:  
>>> - provide general sediment and water quality comparisons to risk  
>>> screening levels and pre-event conditions  
>>> - address concerns about Ferric Hydroxide complexes in suspended solids and depositional areas, floodplains etc.  
>>> - generally, present the risk message for farmers

>>>

>>> What I have:

>>> - estimations of the behavior of the plume generally. Current point of view is: Downstream of Four Corners, plume signature lost in noise of total and dissolved metal concentrations in Surface Water.

>>> - estimations of wide area background concentrations in the San Juan - downstream of Four Corners. These are helpful but some metals, esp total Al are right at the upper end of background estimates.

>>> - Risk comparisons for surface water - some atypical metals exceed agricultural screening levels set by Navajo Nation periodically and exceed Recreation screening levels in point-by-point comparisons. Cd, Mg, V and Co are confounding - some were detected at the source but Navajo is also V country as well as U country.

>>> - Risk/screening level comparisons for sediment since plume impact to present (no background available yet) but so far these meet screening levels.

>>>

>>> Can we talk? Thanks!!

>>>

>>> -----Original Message-----

>>> From: Sally L. Brown [mailto:slb@u.washington.edu]

>>> Sent: Monday, August 17, 2015 4:21 PM

>>> To: Allen, HarryL

>>> Cc: gkester@casaweb.org; Fondahl, Lauren

>>> Subject: RE: November

>>>

>>> Thanks Harry- been interesting to read about CO and think of it

>>> knowing risk and EPA

>>>

>>>> On Mon, 17 Aug 2015, Allen, HarryL wrote:

>>>>

>>>> Looking forward to this! We might be able cover the expenses but the CO incident is really eating our travel budget. We have almost 40 people deployed to CO, NM and AZ. We'll be in touch and hopefully we can still cover the costs.

>>>>

>>>> -----Original Message-----

>>>> From: Sally L. Brown [mailto:slb@u.washington.edu]

>>>> Sent: Friday, August 14, 2015 2:09 PM

>>>> To: gkester@casaweb.org

>>>> Cc: Fondahl, Lauren; Allen, HarryL

>>>> Subject: RE: November

>>>>

>>>> This is a big help- thank you and however many talks you need is

>>>> fine

>>>>

>>>>> On Fri, 14 Aug 2015, Greg Kester wrote:

>>>>>

>>>>> Hi Sally - Yes, we want you as a speaker at our California

>>>>> Bioresources Alliance Symposium. It will be held November 4th and

>>>>> 5th in Sacramento. I am copying Lauren Fondahl (biosolids

>>>>> Coordinator) and Harry Allen (Superfund) with USEPA Region 9.

>>>>> Lauren is the chair and can share the most recent agenda with you.

>>>>> I think you may be asked to speak twice. Harry I thought may have been covering your expenses.

>>>>> Lauren, can you please send us the most recent agenda and Harry

>>>>> can you please let us know if I am off base on the expenses?

>>>>> Thanks very much! - Greg

>>>>>

>>>>>

>>>>> Greg Kester

>>>>> California Association of Sanitation Agencies Director of  
>>>>> Renewable Resource Programs  
>>>>> 1225 8th Street, Suite 595  
>>>>> Sacramento, CA 95814  
>>>>> PH: 916 446-0388  
>>>>> Mobile: 916 844-5262  
>>>>> gkester@casaweb.org  
>>>>> Ensuring Clean Water for California

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>>>>>  
>>>>>

>>>>> -----Original Message-----  
>>>>> From: Sally L. Brown [mailto:slb@u.washington.edu]  
>>>>> Sent: Friday, August 14, 2015 9:12 AM  
>>>>> To: Greg Kester  
>>>>> Subject: November

>>>>>  
>>>>>  
>>>>>

>>>>> Greg

>>>>>

>>>>> I have two days in November with your name on them but don't have any specifics. Do you still  
want me to speak and if so, where, when and about what?

>>>>>

>>>>> Thanks

>>>>> Sally

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